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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/865,649	05/25/2001	Sasan Cyrusian	01 P 09245 US (10808/33)	01 P 09245 US (10808/33) 4542	
757	7590 04/22/2003				
BRINKS HOFER GILSON & LIONE P.O. BOX 10395			EXAMINER		
CHICAGO, I			SHINGLETON,	ETON, MICHAEL B	
			ART UNIT	PAPER NUMBER	
			2817		
			DATE MAILED: 04/22/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	\wedge .					
Office Action Summary	09-865,649		Cyrusia	<u> </u>				
Office Action Summary	LAMINIE	ļ	Group Art Unit					
	SHINGLETO	~	2817					
-Th MAILING DATE of this communication appears on the cover sheet beneath the correspondence address -								
P _{ri} d for R _p ly								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE $T\omega o$ month(s) from the mailing date of this communication.								
 Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 								
Status								
Responsive to communication(s) filed on								
☐ This action is FINAL.								
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213.								
Disposition of Claims								
	🗗 are per	are pending in the application.						
Of the above claim(s) 19 - 26	i∌⁄are wit	is/are withdrawn from consideration.						
☑ Claim(s) 1 - 18	# /are allo	≪ are allowed.						
☐ Claim(s)	is/are reje	is/are rejected.						
☐ Claim(s)	is/are obj	is/are objected to.						
☐ Claim(s)				relection				
Application Papers ☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.								
☐ The drawing(s) filed on is/are objected to by the Examiner								
☐ The specification is objected to by the Examiner.								
☐ The oath or declaration is objected to by the Examiner.								
Pri rity under 35 U.S.C. § 119 (a)-(d)								
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)–(d).								
☐ All ☐ Some* ☐ None of the:								
☐ Certified copies of the priority documents have been received.								
☐ Certified copies of the priority documents have been received in Application No								
☐ Copies of the certified copies of the priority documents have been received								
in this national stage application from the International Bureau (PCT Rule 17.2(a))								
*Certified copies not received:				- ·				
Attachment(s)								
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) 🗆 Int	erview Summa	ry, PTO-413					
☐ Notice of Reference(s) Cited, PTO-892	□ No	☐ Notice of Informal Patent Application, PTO-152						
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	□ O t	her		· .				
Office Action Summary								

Application/Control Number: 09/865,649

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This application is in condition for allowance except for the following formal matters:

The IDS statement PTOL-1449 of paper number 3 is missing, however the references appear to be present. The references present and considered include "Synchronous Recording Channels PRML", PRML: Seagate Uses Space Age Technology Today", Arstechnica "The PC Guide", "Mr and PRML: Technologies in Synergy", "A Tutorial on Convolutional Coding with Viterbi Decoding" and Western Digital Corporation-Glossary. The examiner will wait before listing them on a PTOL-892 form.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A GM replica cell utilizing an error amplifier connected to a current mirror.

This application is in condition for allowance except for the presence of claims 19-26 to an invention non-elected with traverse in Paper No. 8. Applicant is to cancel the noted claims or take other appropriate action (37 CFR 1.144) within the time period below. Failure to take action during this period will be treated as authorization to cancel the noted claims by Examiner's Amendment and pass the case to issue. Extensions of time under 37 CFR 1.136(a) will not be permitted since this application will be passed to issue.

The prosecution of this case is closed except for consideration of the above matter. Applicant's traversal is that both species are in class 330. This is not found persuasive for note that the species are in different subclasses and the search for one species is not required for the other.

The prior art of record fails to disclose or suggest a Gm replica cell that has a Gm setting device, a pair of input transistors that are connected to the Gm setting device and are controlled via a reference voltage, an error detector that is connected to both of the input transistors, a reference current source connected with the error amplifier and a current mirror connected to the error amplifier. The closest piece of prior art happens to be Figure 2 of Atwell 4,833,422 although it is not clear if element 25A controls the

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transconductance or Gm. McClellan et al., Koyama et al. and Marchese et al. all show the use of a Gm setting means. Brehm et al. EP 0,101,174 discloses a transconductance amplifier.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is 703-308-4903. The examiner can normally be reached on Monday-Thursday from 8:30 to 4:30. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

MBS April 19, 2003

> MICHAELB SHANGLETON PRIMARY EXAMINER GROUPARTUNIT 2917